

REMARKS

Claims 9-16 are pending. The amendments to the claims are found in the originally filed specification as follows: Claim 9: p.15, line 32 to p.16, line 1; p.16, lines 11-14; FIG. 1; and Claim 15: p.15, lines 9-15. No new matter is added.

Claims 9-16 are rejected under 35 U.S.C. §103(a) as unpatentable over Oetiker in view of Boyd (U.S. Patent 565,257). (Office Action p.2)

The claimed invention is mechanically different from the combination of cited art, as will be explained herein.

The operation of the claimed invention is described in part in the specification on p.3, lines 16-29 (emphasis added):

According to an aspect of the present invention, a ring compression device for applying force to a ring to fix the ring on a mounting body includes a plurality of pressing members radially provided with tips thereof pointed to a central axis of a substrate and allowing the tips to freely move back and forth in relation to the central axis on a prespecified plane; a rotating body rotatably provided on the substrate on the central axis extending along the plane; and *a driven unit that makes the tip of each of the pressing members move toward the central axis along with rotation of the rotating body and applying force to the ring from the outside thereof with the tips of the pressing members, wherein the rotating body is integrally engaged with each of the pressing members.*

The further operation is described in part in the specification on p.15, line 27 to p.16, line 14 (emphasis added):

The accommodating concave section 11 provided in the substrate 1 accommodates therein the rotational body 3 as shown in FIG. 1 and FIG. 2. The rotational body 3 accommodated within the accommodating concave section 11

supports the pressing members 2 inserted into the guide grooves 13 from the front side. Furthermore, the *cam followers 25 set on the pressing members 2 are inserted into the cam holes 32 on the rotational body 3*. A plurality of support rollers 18 (provided at 5 positions shown in FIG. 1 in this embodiment) are provided along an external periphery of the accommodating concave section 11. These support rollers 18 align the rotational body 3 along the central axis O of the substrate 1 and also support the rotational body 3 so that the rotational body 3 can rotate within the accommodating concave section 11. Furthermore, pressing section 19 are provided in the substrate 1 for supporting the rotational body 3 accommodated within the accommodating concave section 11 from the front side. *When the cam holes 32 are engaged with the cam followers 25, the rotational body 3 integrally engages with the pressing members 2 and can rotate around the central axis O.*

In contrast, Oetiker discloses slide members (20 and 20', 120 and 120', 320 and 230') that move in opposite directions to thereby move segments (30 and 30', 130 and 130', 330 and 330') that are placed inside the slide members, as shown in FIGS. 1, 21 and 45.

Regarding FIG. 1, as explained in Oetiker col.6, lines 40-60 (emphasis added):

In operation, as the *spindle 60* is rotated in one direction, the radial arm portions 20a and therewith the *segmental slide members 20 and 20' are drawn toward one another by way of the pivot plates 50 and pivot pins 54 whereby the segments 30 are moved radially inwardly* by engagement of their abutment surface portions 34 with the non-radial surface portions 29, thereby reducing the diametric dimension formed by the inner clamping surfaces 31 of the segments 30. *Rotation of the spindle 60 in the opposite direction will spread apart the arm portions 20a. The segments 30 are not positively connected to the sliding members 20 and 20' but are merely in abutting engagement whereby the wire springs 40' will cause the segments 30 to follow a radial outward movement as permitted during opening rotation of spindle 60 by engagement of the surface portions 34 with the surface portions 29 that now increase gradually in diametric dimension.* The spindle 60

may thereby be rotated manually, for example, with the use of a conventional socket wrench but is preferably rotated by the use of an electric, hydraulic or pneumatic motor adapted to be connected with the spindle.

Regarding FIG. 21, as further explained in col.8, line 61 to col.9, line 8 (emphasis added):

The operation of the machine of FIGS. 21 through 44 is similar to that of the embodiment of FIGS. 1 through 19 in that movement of the slide carriage 250 toward the housing parts 111 and 111' will force the pressure rollers 223 to slide along the guide grooves 251a and 251b *causing the arm portions 120a and 120'a to approach one another and thereby cause the segments 130, 130' to move radially inwardly in a diameter-reducing direction, whereby the compression ring held along the inner surfaces 131' of the segments 130, 130' are compressed. Movement of the slide carriage 250 in the opposite direction will again cause reopening of the segmental slide members 130, 130', followed by the outward movement of the segments 130, 130' as a result of the spring action of the wire spring or the like.*

Oetiker fails to disclose, "the driving mechanism being configured to integrally move, along with the rotation of the rotating body in one direction, that engages with the rotating body and the pressing members such that when the rotating body rotates, all of the pressing members integrally move toward the central axis."

In the present invention, because the cam followers and cam holes are provided as recited in claims, moving the pressing members toward the central axis is enabled by *rotating the rotating body in one direction*. Boyd in combination with Oetiker fails to suggest the claimed mechanics. As a result, the 35 U.S.C. §103(a) rejection should be withdrawn and the claims, as amended, are in condition for further examination.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

Dated: November 26, 2010

Respectfully submitted,

CUSTOMER NUMBER: 21874

Electronic signature: /James E. Armstrong, IV/
James E. Armstrong, IV

Registration No.: 42,266
EDWARDS ANGELL PALMER & DODGE
LLP

P.O. Box 55874
Boston, Massachusetts 02205
(202) 478-7375
Attorneys/Agents For Applicant